

CLAIMS

What is claimed is:

1. A method to display a status of an optical recording and/or reproducing apparatus, comprising:

determining a type of an optical disc loaded into a tray; and

transmitting a predetermined signal based on the determination result to a laser emitting diode module comprising at least two laser emitting diodes, which emit different color beams so that the laser emitting diode module emits a color beam in accordance with the determined type of the optical disc.

2. The method of claim 1, further comprising:

driving the laser emitting diode module so that an emission mode of the laser emitting diode module is changed based on which operation is performed on the optical disc.

3. The method of claim 2, wherein the emission mode of the laser emitting diode module comprises a blink mode indicative of an operation being performed.

4. An apparatus to display a status of an optical recording and/or reproducing apparatus, comprising:

an optical pickup to radiate light onto an optical disc and to receive the light reflected from the optical disc;

a system controller to control the optical pickup, to determine a type of the optical disc from an optical signal received via the optical pickup, and to perform a servo operation depending on the determined type of the optical disc; and

a laser emitting diode module connected to the system controller, including at least two laser emitting diodes, which emit different color beams so that the system controller drives the laser emitting diode module to emit a color beam in accordance with the determined type of the optical disc.

5. The apparatus of claim 4, wherein the system controller drives the laser emitting diode module so that an emission mode of the laser emitting diode module is changed depending on which operation is performed on the optical disc.

6. The apparatus of claim 5, wherein an emission mode of the laser emitting diode module driven by the system controller comprises a blink mode indicative of an operation being performed.

7. A method to display a status of an optical recording and/or reproducing apparatus, comprising:

determining a type of an optical disc loaded into a tray; and
transmitting a predetermined signal based on the determination result to a laser emitting diode module; and
emitting a light beam in accordance with the determined type of the optical disc.

8. The apparatus of claim 4, further comprising:
a radio frequency amplifier to convert the signal received from the optical pickup into an electric signal, and to detect a surface reflection signal reflected from a surface of the optical disc and an S-Curve signal detected from a recording surface of the optical disc.

9. The apparatus of claim 8, wherein the system controller compares a time interval between the surface reflection signal and the S-Curve signal detected by the radio frequency amplifier with a predetermined reference value.

10. The apparatus of claim 9, wherein the system controller determines that the optical disc is a digital versatile disc when distance between the surface of the optical disc, and the recording surface is 0.6mm and the time interval is less than the predetermined reference value.

11. The apparatus of claim 9, wherein the system controller determines that the optical disc is a compact disc when distance between a disc surface and a recording surface is 1.2mm, and the time interval is more than the predetermined reference value.

12. The method according to claim 7, further comprising:
converting the signal received from the optical pickup into an electric signal, and
detecting a surface reflection signal reflected from a surface of the optical disc and an S-Curve signal detected from a recording surface of the optical disc.

13. The method of claim 12, further comprising:
comparing a time interval between the surface reflection signal and the S-Curve signal detected by the radio frequency amplifier with a predetermined reference value.
14. The method of claim 13, wherein it is determined that the optical disc is a digital versatile disc when distance between the surface of the optical disc, and the recording surface is 0.6mm and the time interval is less than the predetermined reference value.
15. The apparatus of claim 13, wherein it is determined that the optical disc is a compact disc when distance between a disc surface and a recording surface is 1.2mm, and the time interval is more than the predetermined reference value.
16. The apparatus of claim 4, wherein the at least two laser emitting diodes of the laser emitting diode module comprise:
first and second laser emitting diodes.
17. The apparatus of claim 16, further comprising:
negative nodes that are grounded, provided to the first and second laser emitting diodes;
positive nodes connected to the system controller to be used as input nodes, provided to the first and second laser emitting diodes;
a housing having at least one side made of a semitransparent or transparent window to surround the first and second laser emitting diodes; and
a groove into which the semitransparent or transparent window of the housing is inserted, which is formed in a front surface of the optical recording and/or reproducing apparatus.
18. The apparatus of claim 17, wherein
only the first laser emitting diode emits light when the system controller outputs a high level signal only to the positive node of the first laser emitting diode; and
both first and second laser emitting diodes emit light when the system controller simultaneously outputs the high level signal to the positive nodes of each of the first and second laser emitting diodes.

19. The apparatus of claim 17, wherein only the second laser emitting diode emits light, when the system controller outputs a high level signal only to the positive node of the second laser emitting diode.

20. The apparatus of claim 17, wherein the system controller outputs a signal to the positive nodes of the first and/or second laser emitting diodes based on the type of the optical disc.

21. The apparatus of claim 20, wherein when the system controller outputs the signal to the positive nodes of the first and/or second laser emitting diodes, the system controller toggles the signal so that the signal is alternatively high and low to allow the light to blink.

22. An apparatus to display a status of an optical recording and/or reproducing apparatus, comprising:

- an optical pickup to radiate light onto an optical disc and to receive the light reflected from the optical disc;

- a system controller to control the optical pickup, to determine a type of the optical disc from an optical signal received via the optical pickup, and to perform a servo operation depending on the determined type of the optical disc; and

- a light element connected to the system controller, which emits different color beams in accordance with the determined type of the optical disc